# **Building, Leading, and Maintaining Research Teams**



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#### **Three Messages**

- **Effective interdisciplinary teams are needed to meet the challenge of behavioral research today.**
- Building, leading and maintaining effective interdisciplinary research teams require intention.
- Effective interdisciplinary teams pay off.

# The Challenge to Research Today

\* "There has been a scientific revolution the last few years. The opportunities for discoveries has never been greater, but the complexity of biology (behavior) remains a daunting challenge."

Dr. Elias Zerhouni, Director, NIH Sept, 2003



#### To Meet the Challenge

- \*Diversity of disciplines is needed for discovering, developing and delivering treatments and making scientific advances.
- \*Diverse disciplines can work well in teams.

### A Team is...

... a small number of consistent people with a shared purpose, common performance goals, complementary skills, and a common approach to its collective work.

Manion J (1997, Semin Nurse Manag 31-38)



# What are the Benefits of Interdisciplinary Research Teams?



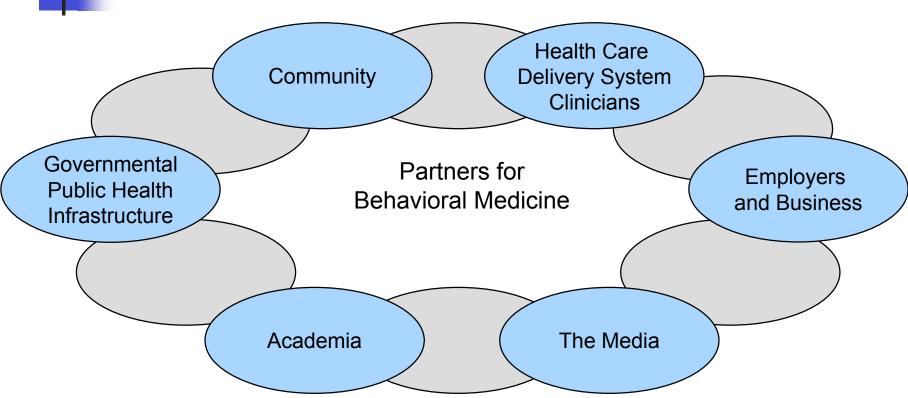
### Interdisciplinary Teams Can Meet the Challenge Research Requires by...

- Working together from their own perspectives with commonly agreed on goals.
- Exploring different facets of a question.
- \* Providing diverse viewpoints looking at reality and higher levels of explanatory power.
- Developing innovative approaches for combining skills, methods and disciplines to accelerate discovery.
- Enhancing the growth of individuals.

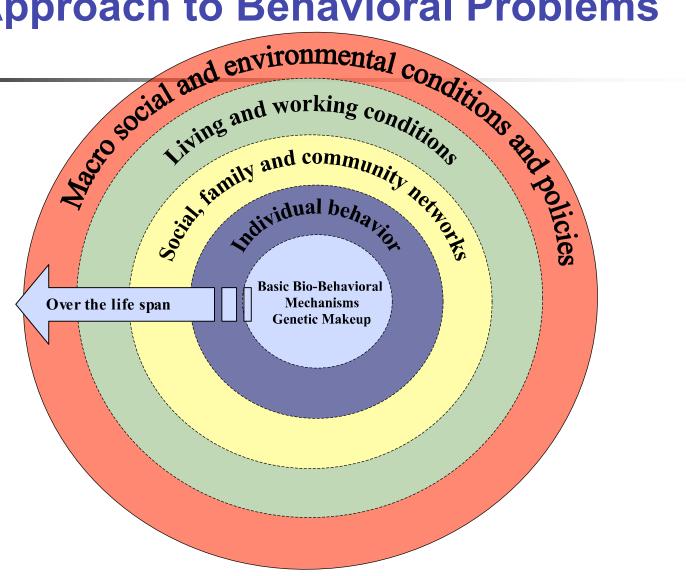
Interdisciplinary research requires team science.

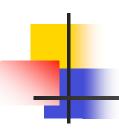


#### Partners in Applying Behavioral Medicine Research and Practice



#### **Ecological Model: Multi-Level Approach to Behavioral Problems**





# Interdisciplinary Teams Can Address Multiple Levels in Research

Social/Environmental

Behavioral/Psychological

Organ Systems

Cellular

Molecular

Anderson N (1999 Annals NY Acad Sci, 302-12)



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#### What made them effective?



Strong Leadership which usually comes from one individual to begin with and progressively comes from the team as a whole or from different members at different times.



# **Characteristics of Effective Research Teams**

An effective team...

- \* <u>Agrees</u> on and commits to shared goals, objectives, roles and responsibilities, and how it will work together.
- \* Communicates well and appreciates differences.
- \* *Expects* members to be accountable, responsible, and prepared.
- \* Shares information, perspectives, and progress.

Leadership is a continuing requirement for success.



# **Good Leaders are Intentional: They Facilitate "ACES"**

#### They:

- Communicate well.
- Are enthusiastic and committed to a goal.
- Draw on each member's strengths.
- \* Respect others.
- Establish direction.
- Have skills in group dynamics.
- Build trust and confidence.



To sum it up...

Objectives and roles are clear and leadership strong;

Communication is good;

The structure is strong and understood;

The rules of the road are clear and democratic;

Everybody benefits.



### How do you Build an Effective Interdisciplinary Research Team?



- Network.
- Meet with people to determine their research interests.
- Go outside your department or school if necessary.
- Determine appropriate disciplines and participants.
- Find a mentor.
- Don't be timid.



#### **Building Effective Research Teams: Determining Appropriate Disciplines**

- Use your theoretical framework to guide.
- Funding agencies often suggest disciplines.
- Decide on the skills and competencies needed.
- \* Each discipline included should have a role and provide a unique contribution.
- Include a research assistant or project director to provide infrastructure support.



#### **Building Effective Research Teams: Choosing Participants** (cont)

\* Every team member should be able to articulate the role of other members. Crosstraining is not needed. A clear understanding of roles is needed.



#### **Building Effective Research Teams: Inviting Participants**

- \* Describe clearly and comprehensively the research issue.
- Put goals and aims on paper even if tentative.
- Communicate benefits for participating.
- Develop strategy to communicate results to other involved individuals not invited to the meetings.



# **Example of an Effective Interdisciplinary Research Team**

- Use of Soy Isoflavones for Menopausal Vasomotor Symptoms
  - Daidzein
  - Genistein
- NCCAM Application



#### **Soy Isoflavones for Menopausal Vasomotor Symptoms: Primary Aims (3 of 6)**

\* To assess the feasibility of recruitment and retention of women for a RCT of isoflavone supplements for the reduction of VMS.

<u>Disciplines</u>: Behavioral scientist, health educator, biostatistician, physician



#### **Soy Isoflavones for Menopausal Vasomotor Symptoms: Primary Aims** (cont)

\* To examine the adherence of women to using an isoflavone capsule to reduce VMS.

<u>Disciplines</u>: Behavioral scientist, health educator, biochemist, biostatistician, physician



#### **Soy Isoflavones for Menopausal Vasomotor Symptoms: Disciplines and Contributions**

- Judith Ockene, Div of Prev & Behav Med (DPBM), UMMS, PI, Behavioral Scientist
- Elizabeth Jackson, Div of Cardiology, UMMS, Co-PI, Physician
- Nancy Avis, Wake Forest Univ School of Med, QoL Consultant
- Linda Churchill, DPBM, UMMS, Project Director, Health Educator
- Sybil Crawford, DPBM, UMMS, Biostatistician
- Jennifer Kelsey, DPBM, UMMS, Epidemiologist, Women's Health
- Barbara Olendzki , Div of Prev & Behav Med, UMMS, Nutritionist
- Johanna Lampe, Nutritional Consultant, FHCRC



#### **Leading Effective Research Teams**

- Prepare an agenda.
- Develop a structure for how team will work together.
- \* Attend to logistics.
- \* Facilitate effectively.



# **Develop a Structure: Questions for Teams to Address**

- What are our norms for working together?
- \* How will we communicate with each other?
- \* How will we make decisions?
- \* How will we resolve conflict?
- What decisions are individual ones and what are team decisions?
- \* How often will we meet?
- Will we keep minutes?
- What are members' responsibilities?



#### **Develop a Structure: Norms**

- \* Participate
- \* Responsibility
- Open Mind
- Confidentiality
- \* Experiment
- ❖ Sensitivity Feedback
- \* Speak Out



# Leading Effective Research Teams: Facilitating a Meeting

- \* Keep the meeting focused and moving forward.
- Open with short summary of purpose and agenda.
- Stick to time allocated for each item.
- ❖ Close each item with actions to be taken by whom and by when.



# Think about an effective research team which continued long-term

#### What contributed to its longterm success?



#### Characteristics of a Maintained Effective Team

- Doesn't waste time –stays focused.
- Measures its progress by attainment of goals and objectives.
- Identifies and deals with challenges.
- Open to everyone's perspectives/views.
- Everyone benefits and has fun.



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